

REMARKS

By the above amendment, independent claims 38, 44 and 50 have been amended to recite additional features and clarify features of the present invention and new claims 56 - 58 have been added reciting further features of the present invention, as will be discussed below.

Applicants note that claims 38 - 50 have been amended to recite further features of the present invention, it being noted that as previously described, the present invention is directed to the structural arrangement as illustrated in Figs. 6 and 7, for example, wherein, for example, Fig. 2 illustrates a cross sectional arrangement showing an upper magnetic pole top layer recessed from the air bearing surface, a first coil formed between the upper magnetic pole top layer and the lower magnetic main layer, a first insulating layer covering the first coil and a second insulating layer formed between the first insulating and the non-magnetic insulating layer, as now recited in the claims of this application, so as to clarify features of the present invention. It is noted that different claims utilize different terminology with respect to the insulating layers such that a different insulating layer may be referred to as a first insulating layer in one claim and a first insulating layer in another claim, as described below.

As to the rejection of claims 38 - 41, 43 - 47, 49 - 53 and 55 under 35 USC 102(e) as being anticipated by Sasaki (US 6,624,971), this rejection is traversed insofar as it is applicable to the present claims, and reconsideration and withdrawal of the rejection are respectfully requested.

As to the requirement to support a rejection under 35 USC 102, reference is made to the decision of In re Robertson, 49 USPQ 2d 1949 (Fed. Cir. 1999), wherein the court pointed out that anticipation under 35 U.S.C. §102 requires that each and

every element as set forth in the claim is found, either expressly or inherently described in a single prior art reference. As noted by the court, if the prior art reference does not expressly set forth a particular element of the claim, that reference still may anticipate if the element is "inherent" in its disclosure. To establish inherency, the extrinsic evidence "must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill." Moreover, the court pointed out that inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient.

Applicants note that in rejecting the claims over Sasaki, the Examiner at page 3 of the office action, utilized Fig. 13 of Sasaki while annotating such figure as Fig. 13(A) and Fig. 13(B) in relation to different claims, in the manner set forth. As an aid to the Examiner, applicants herewith submit as an Attachment, annotated versions of Fig. 6 and Fig. 4A, 4B of Sasaki, wherein Fig. 6 corresponds generally to Fig. 13 of Sasaki, and Figs. 4A and 4B illustrate the features of Sasaki in cross section.

Turning to claims 38 - 41 and 43, noting that claim 38 is an independent claim and the Examiner's comments regarding the applicability of Sasaki to the claimed invention, applicants submit that as noted above, claim 38 has been amended so as to more clearly evidence the differences between Sasaki and the claimed invention. More particularly, applicants submit that by reciting the position of the second insulating layer (insulating layer 19 as illustrated in various figures of the drawings of this application and described in the specification), as well as the upper magnetic pole, the differences between the claimed invention and Sasaki should become apparent. Applicants note that Sasaki discloses a top pole 27c, as illustrated in Fig.

4A of the Attachment (which corresponds to the recited upper magnetic pole top layer of claim 38, for example) a thin film coil 29, (see Attachment Fig. 4A which corresponds to the first coil 8 of this application), an insulating layer 30 (see Figs. 3A and 3B of Sasaki as well as annotated Attachment Figs. 4A and 4B, which corresponds to the recited first insulating layer 7 of claim 38) an insulating film 28 (see Figs. 3A and 3B of Sasaki and the annotated Attachment Figs. 4A, 4B which corresponds to the second insulating layer 19 of claim 38). However, the fourth depth position defined by a closest edge from the air bearing surface of the first insulating layer, as recited in claim 38 necessarily corresponds to THO (as shown in Attachment Fig. 4A of Sasaki). Applicants submit that since the fourth depth position, as recited in claim 38, is necessarily longer than the third depth position from the air bearing surface, and another portion which is formed so as to extend from a second depth position to a third depth position has a part which does not face the upper magnetic pole, as recited in claim 38, Sasaki which has the same width for the bottom pole 7 and the top pole tip 27A to T1 (as shown in Attachment annotated Fig. 6 of Sasaki), applicants submit that Sasaki does not disclose "another portion which is formed so as to extend from a second depth position from the air bearing surface to a third depth position from the air bearing surface and having a part which does not face the upper magnetic pole" as recited in claim 38 and the dependent claims. Applicants note that since the projection step portion in the present invention is larger than the upper magnetic pole in relation to the "another portion" such enables absorption of the leakage from the upper pole as described in the specification in relation to Fig. 7 of the drawings of this application as described at page 38 of the specification. This structural arrangement, which is not disclosed by Sasaki, enables absorption of the leakage flux, and applicants submit that by the present

amendment, claim 38 and the dependent claims more particularly recite such feature which is not disclosed or taught by Sasaki in the sense of 35 USC 102 or 35 USC 103 such that claim 38 and the dependent claims patentably distinguish thereover and should be considered allowable at this time.

With respect to claims 44 - 47 and 49, it is noted that claim 44 has been amended to recite that the upper magnetic pole has a second width which is larger than the first width from a first depth position from the air bearing surface, that the projection step portion is above the lower magnetic pole front end portion and that "wherein widths of the upper magnetic pole and the track width direction are equal from the air bearing surface to the first depth position". Since the upper magnetic pole from the air bearing surface to the first depth position, in accordance with the present invention, has an equal width from the air bearing surface, the first depth position is the closest position from the air bearing surface where the width of the upper magnetic pole starts increasing, applicants submit that such feature is not disclosed by Sasaki, based upon the Examiner's comments and the annotated Fig. 13(B) at page 3 of the office action. Thus, applicants submit that by the present amendment, the features as recited in claim 44 and the dependent claims have been clarified, and such features are not disclosed in Sasaki in the sense of 35 USC 102, and claim 44 and its dependent claims should be considered allowable thereover.

With respect to claim 50 and the dependent claims thereof, it is noted that such claim has been amended in a manner similar to claim 38 in reciting an upper magnetic pole top layer and a first coil. However, this claim recites the feature of a first insulating layer (which corresponds to insulating layer 19 of the present application) formed on the gap layer and sharing an edge with the upper magnetic pole top layer, wherein the projection step portion includes one portion which faces

the upper magnetic pole, and another portion formed from a second depth position to a third depth position from the air bearing surface, the another portion having a part which does not face the upper magnetic pole. It is noted that claim 50 recites additional features in terms of widths at different depths positions and that a distance from the air bearing surface to the second depth position of the another portion is shorter than a distance from the air bearing surface to the first depth position. Applicants submit that claim 50 and its dependent claims more clearly define the position of the first insulating layer, which is the insulating layer 19 in the figures of the drawings and the specification of this application, and the upper magnetic pole, so that claim 50, as amended, more clearly distinguishes from Sasaki. That is, while Sasaki discloses a top pole 27c which corresponds to the upper magnetic pole top layer, as recited in the claims of this application, and a thin film coil 29 (which corresponds to coil 8 of this application), Sasaki does not disclose an insulating layer formed on a gap layer and sharing an edge with an upper magnetic pole top layer as provided by the insulating layer 19, as illustrated in Fig. 2 of the drawings of this application. Even assuming *arguendo*, that the insulating layer 30 of Sasaki might be considered the first insulating layer, as recited in claim 50, since claim 50 also recites the feature that the fourth depth position is defined by a closest edge from the air bearing surface of the first insulating layer and that a distance between the fourth depth position and the air bearing surface is longer than a distance between the third depth position and the air bearing surface, and that another portion is formed from a second depth position to a third depth position in the air bearing surface, the another portion having a part which does not face the upper magnetic pole, it is apparent that Sasaki does not disclose such additional features of claim 50. Applicants submit that Sasaki which has the same width for the bottom pole 7 and the top pole tip 27A to

T1, as shown in annotated Fig. 6 of the attachment, does not disclose another portion which is formed so as to extend from a second depth position to a third depth position from the air bearing surface, the another portion having a part which does not face the upper magnetic pole, as recited in claim 50 and the dependent claims, such that these claims patentably distinguish over Sasaki in the sense of 35 USC 102 and should be allowable thereover.

As noted above, since the projection step portion has the another portion which is larger than the upper magnetic pole, in accordance with the claimed invention, such feature enables absorption of the leakage flux from the upper pole as described in the specification in relation to Fig. 7 of the drawings thereof, and Sasaki does not disclose or teach such feature. Thus, claim 50 and the dependent claims thereof patentably distinguish over Sasaki in the sense of 35 USC 102 and should be considered allowable thereover.

With respect to the newly added dependent claims 56 - 58, it is noted that such claims recite additional features of the present invention and these dependent claims together with the other dependent claims of this application, recite features not disclosed or taught by Sasaki, when considered in conjunction with the parent claims thereof, for the reasons given above. Accordingly, applicants submit that the dependent claims also patentably distinguish over Sasaki in the sense of 35 USC 102.

In view of the above amendments and remarks, applicants submit that all claims present in this application patentably distinguish over the cited art and should now be in condition for allowance. Accordingly, issuance of an action of a favorable nature is courteously solicited.

To the extent necessary, applicants petition for an extension of time under 37 CFR 1.136. Please charge any shortage in the fees due in connection with the filing of this paper, including extension of time fees, to the deposit account of Antonelli, Terry, Stout & Kraus, LLP, Deposit Account No. 01-2135 (Case: 520.40591X00), and please credit any excess fees to such deposit account.

Respectfully submitted,

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A handwritten signature in cursive script, appearing to read 'Melvin Kraus', is written over a horizontal line.

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